

Gunnery Department MLRS Division

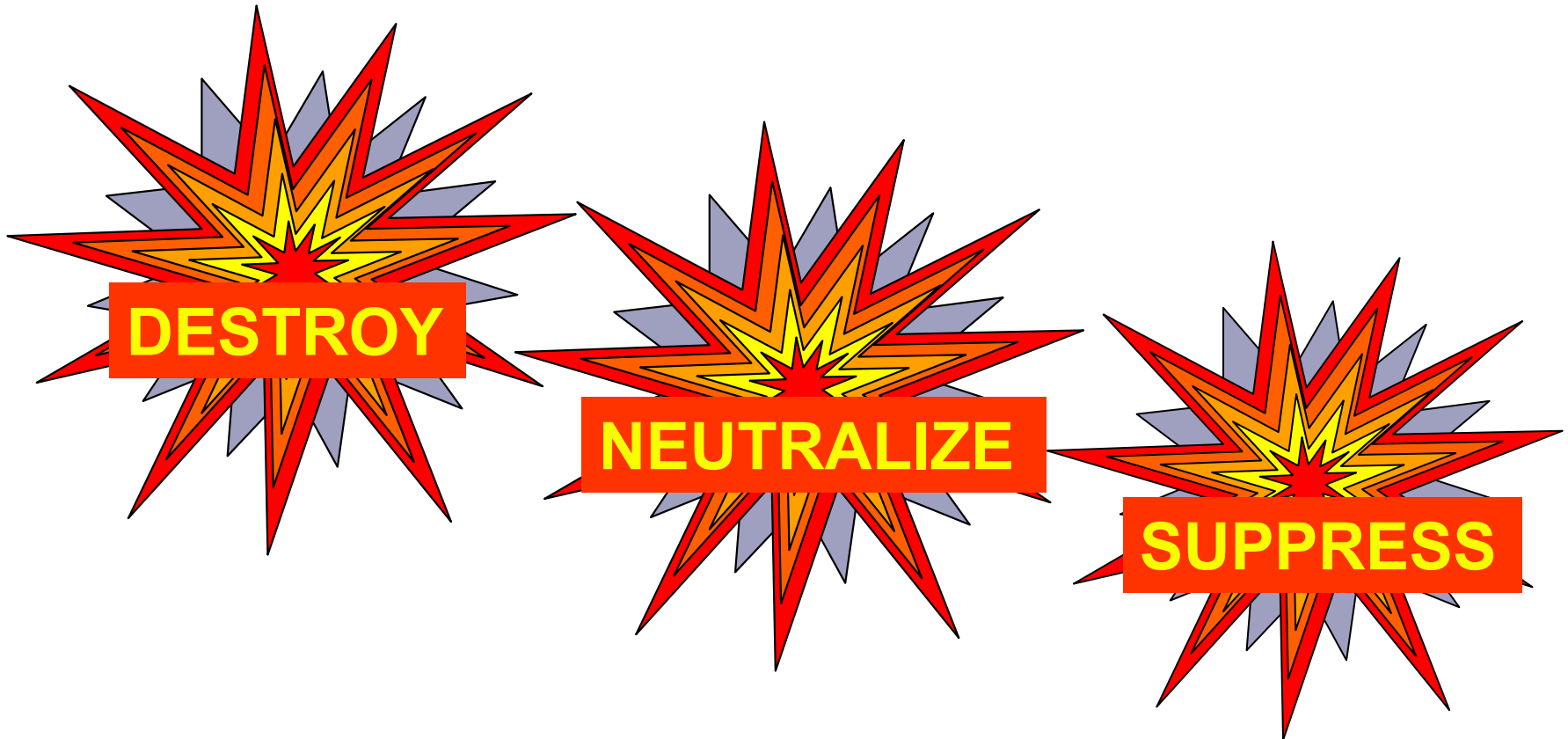
“Standards Start Here”



Field Artillery Officer Basic Course

MLRS Doctrine And Tactics

The Mission of the Field Artillery is to...



the enemy by cannon, **ROCKET** and **MISSILE** fire
and to help integrating all fire support assets into
combined arms operations.

Learning Activities

- Identify Employment Considerations for MLRS
- Identify the Tactical Missions of MLRS
- Identify the Organization and Operations of MLRS units
- Identify CSS Requirements for MLRS Units

Identify Employment Considerations for MLRS

The diagram illustrates a network topology for a defense scenario. It features a central area with various nodes and connections. The nodes are represented by different shapes: squares, circles, and triangles. Some nodes are labeled with 'OFFENSE' and 'DEFENSE' arrows. The diagram is set against a light blue background with a grid pattern.

The nodes are arranged in a hierarchical structure. At the top, there are three nodes labeled 'OFFENSE'. Below them, there are three nodes labeled 'DEFENSE'. The nodes are connected by lines, forming a network. The connections are represented by straight lines and curved lines. The diagram shows a complex network of nodes and connections, with some nodes having multiple connections.

The diagram is a schematic representation of a network topology. It shows a central area with various nodes and connections. The nodes are labeled with 'OFFENSE' and 'DEFENSE' arrows. The diagram is set against a light blue background with a grid pattern.

P 1-1

Employment Considerations

System Capabilities

- Range
- Organizational Structure

Close Operations

- Counter fire
- Raids
- SEAD (**S**uppression **E**nemy **A**ir **D**efense)

Deep Operations

- ATACMS Block I and IA
- D³A Methodology

Employment Considerations

Rear Operations

- Area fire weapons system
- Not the weapon system of choice

Positioning

- Survivability
 - Limited crew served weapons
 - Enemy target Acquisition
- Communications

Employment Considerations

Planning and Coordination

- Launcher redundancy
 - Rocket Fires (short of FSCL)
 - Missile fires (beyond the FSCL)
- Fire Support Planning
 - Configuration Time
 - Reaction Time
 - Launcher Response Time
 - Munitions Load

Identify the Tactical Missions of MLRS

Command Relationship

- OPTION 1 - Corps retains direct control of the MLRS battalion (GS).
- OPTION 2 - Corps attaches MLRS battalion to an FA brigade but still establishes priorities of fire (GS sometimes GSR).
- OPTION 3 - Attach the battalion or battalion(-) to a division (GSR/R).

Tactical Missions

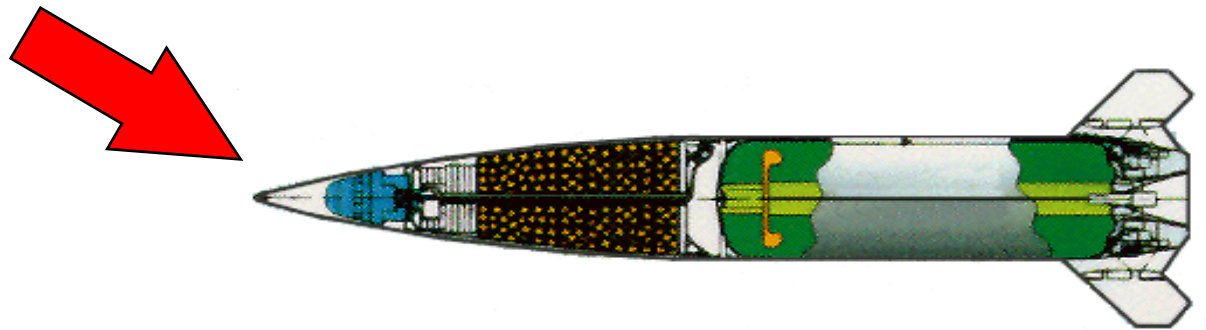
After establishing a command relationship, the Force Commander assigns the Battalion a tactical mission. They are:

- General Support (GS)
- General Support Reinforcing (GSR)
- Reinforcing (R)
- Direct Support (DS)

General Support (GS)

- Provides fires for the entire force.
- Most centralized control.
- Provides force commander with the most responsive fires.

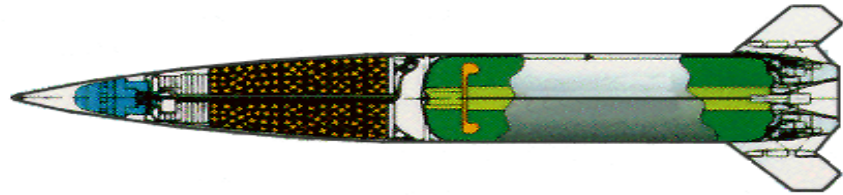
Typically these



General Support Reinforcing (GSR)

- Controlled by force FA HQs.
- Provides flexibility to meet the needs of various tactical situations.
- Answers Calls for Fire in priority from the Force FA HQ, then the Reinforced unit

Few of these



Many of these



Reinforcing (R)

- When reinforcing a DS battalion
- MLRS ammunition expenditure may exceed re-supply capability.
- Must provide Liaison section for coordination

Lots of these!!



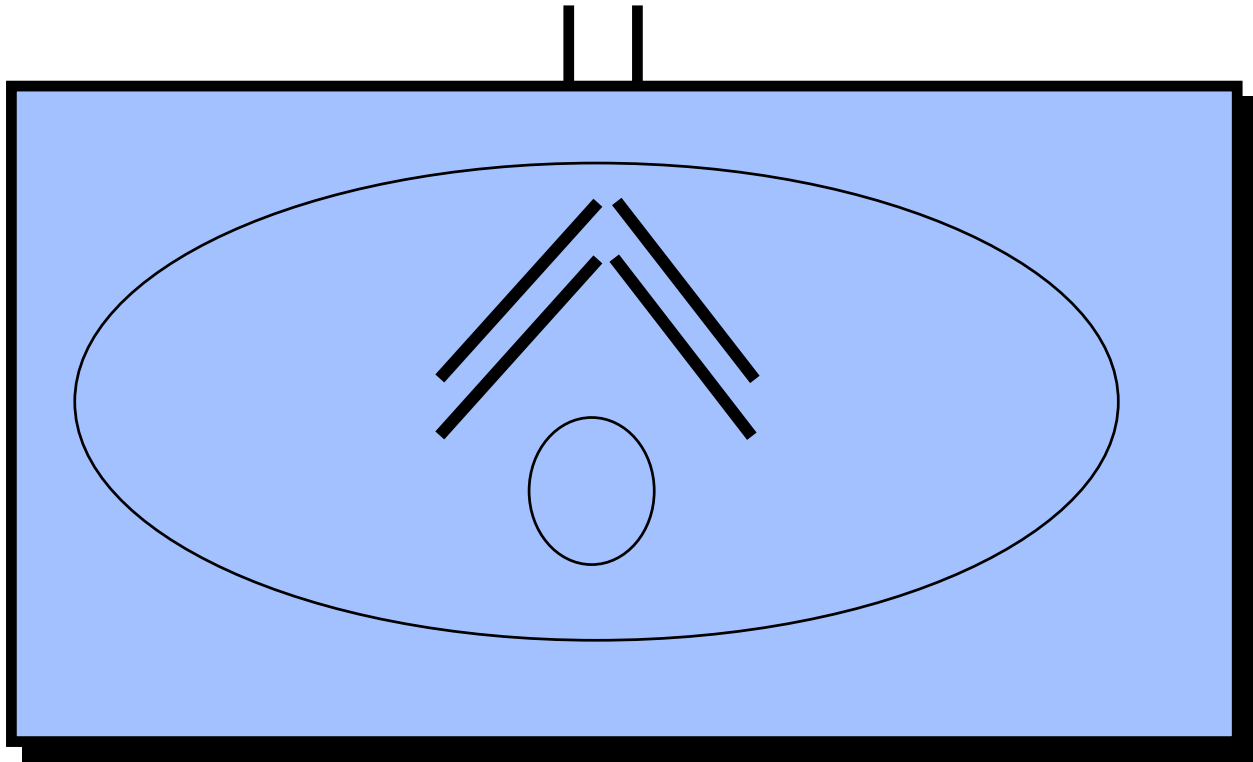
Direct Support (DS)

- No fire support element
- Lacks diversity of ammunition
- Area weapon system (Danger Close 2km)
- MLRS fires less responsive than cannon
- Ammunition re-supply (sustaining fires)

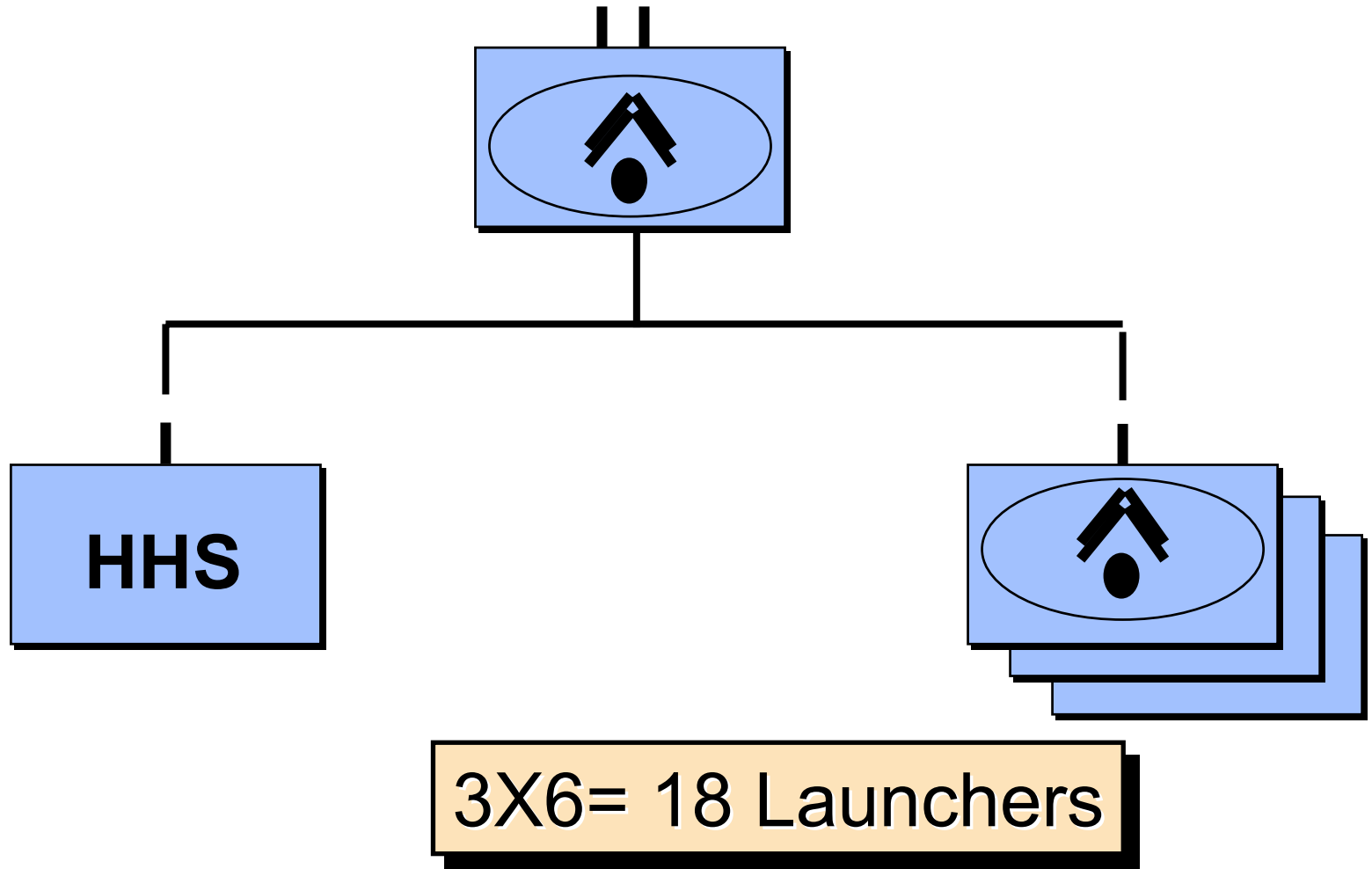
Identify the Organization and Operations of the
Battalion, Firing Battery, and Platoon

Organization and Operations

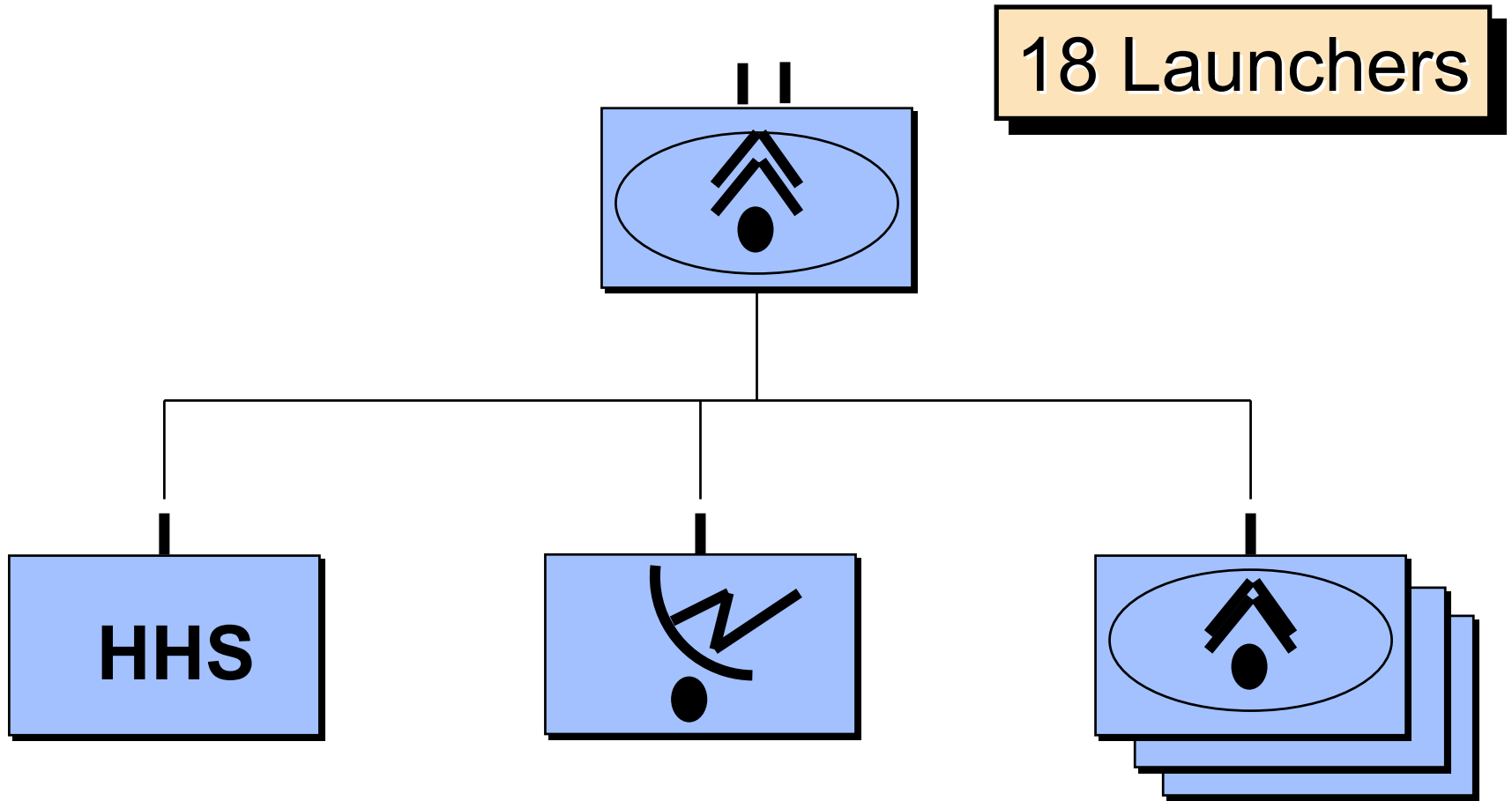
Battalion



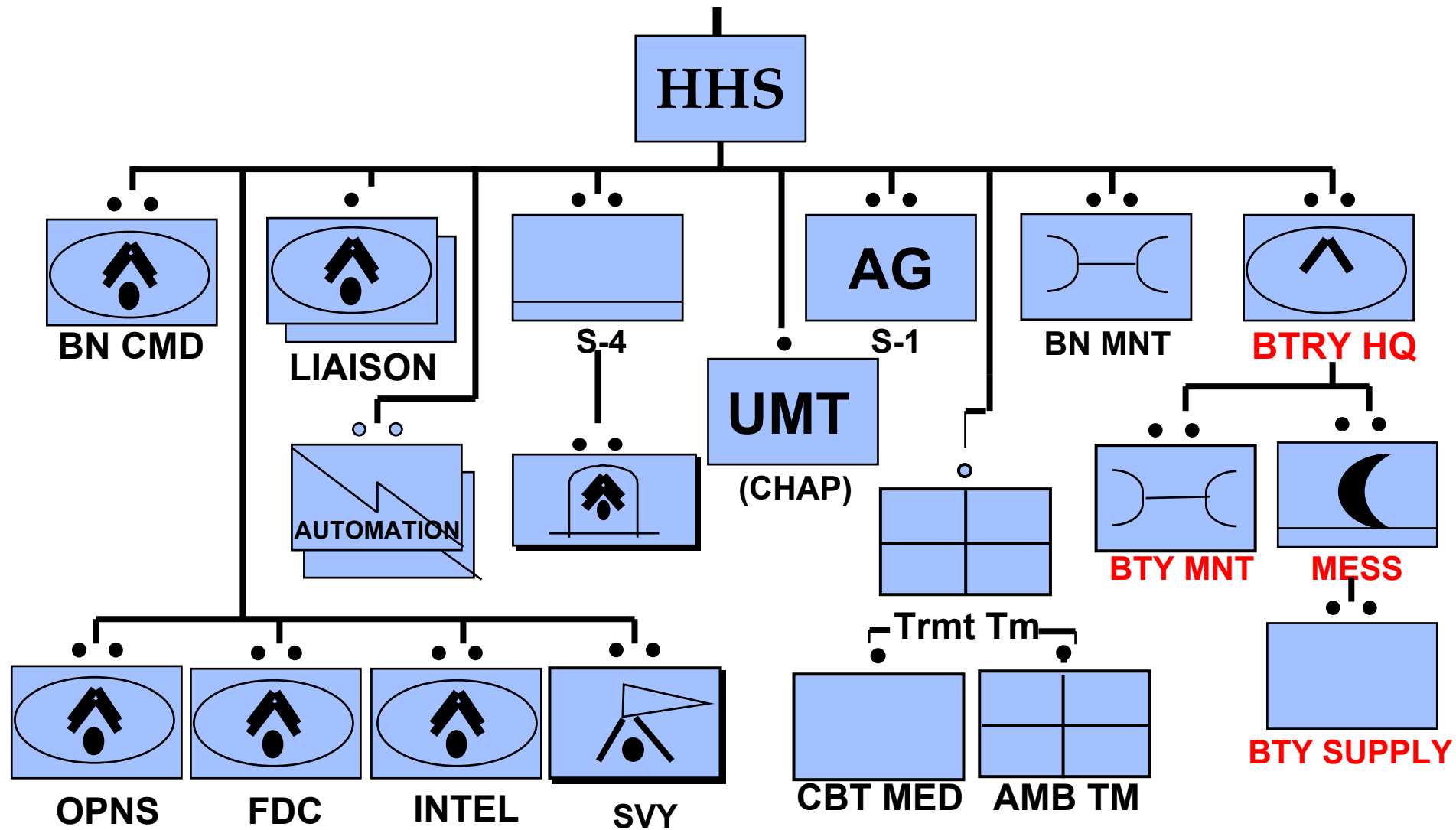
Corps MLRS Battalion



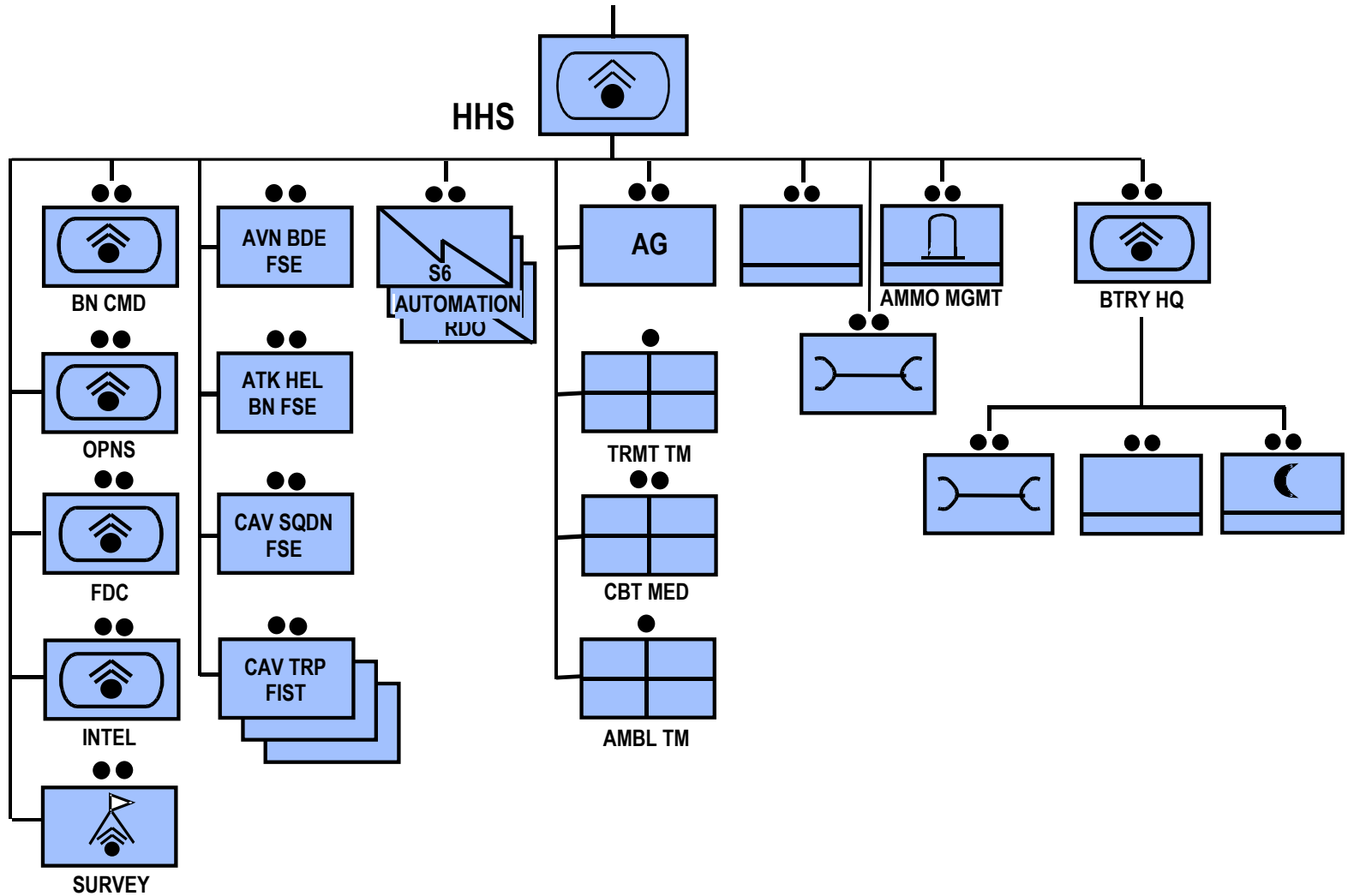
Divisional MLRS Battalion



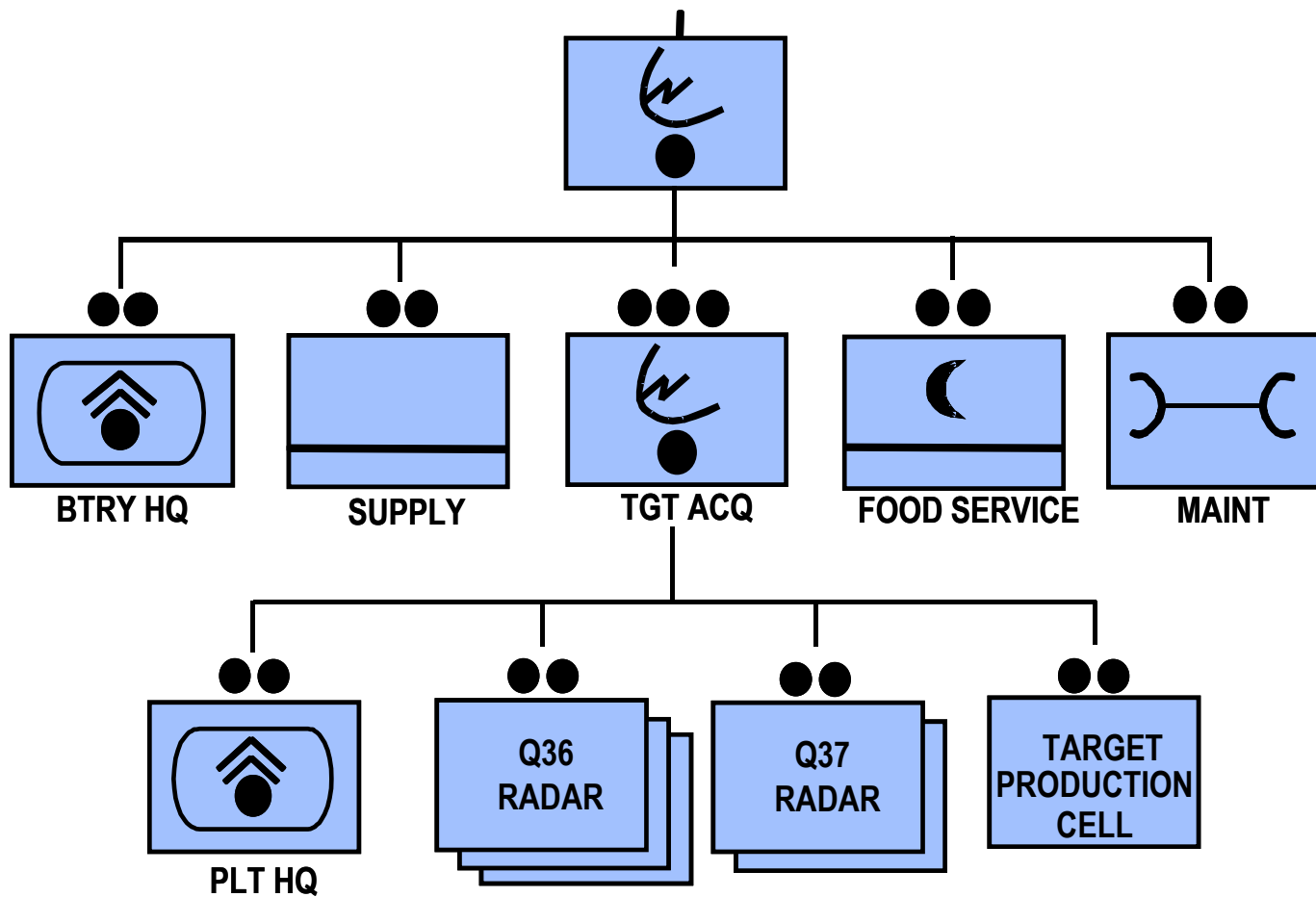
HHS Battery



Divisional HHS Battery



Divisional HHS Battery TAB Organization



HHS Functions

- Command and control the batteries.
- Provide tactical fire direction.
- Provide liaison to controlling or reinforcing headquarters.
- Provide admin and medical support for the batteries.

Key Personnel

- Operations/Liaison Section
- Intelligence Section
- Battalion Logistics

Ops/Fire Direction Section

- Battalion S3 (MAJ)
- Operations Officer (CPT)
- Fire Direction Officer (CPT)

Liaison Section

- Liaison Officer(CPT)
- Liaison Sergeant (SSG)
- Driver (SPC)

Intelligence Section

- S2 Officer
- Radar WO (Targeting)
- Intelligence Sergeant
- MI NCO

Logistics Section

- Executive Officer (MAJ)
- S1 (CPT)
- Maintenance Officer (CPT)
- Maintenance Tech (CW2)
- S4 (CPT)
- Property Book Officer (CW2)
- Physician Assistant (1LT)

Movement - Displacement Options

Major Considerations:

- Maneuver Unit Scheme of Maneuver
- Continuous fire support

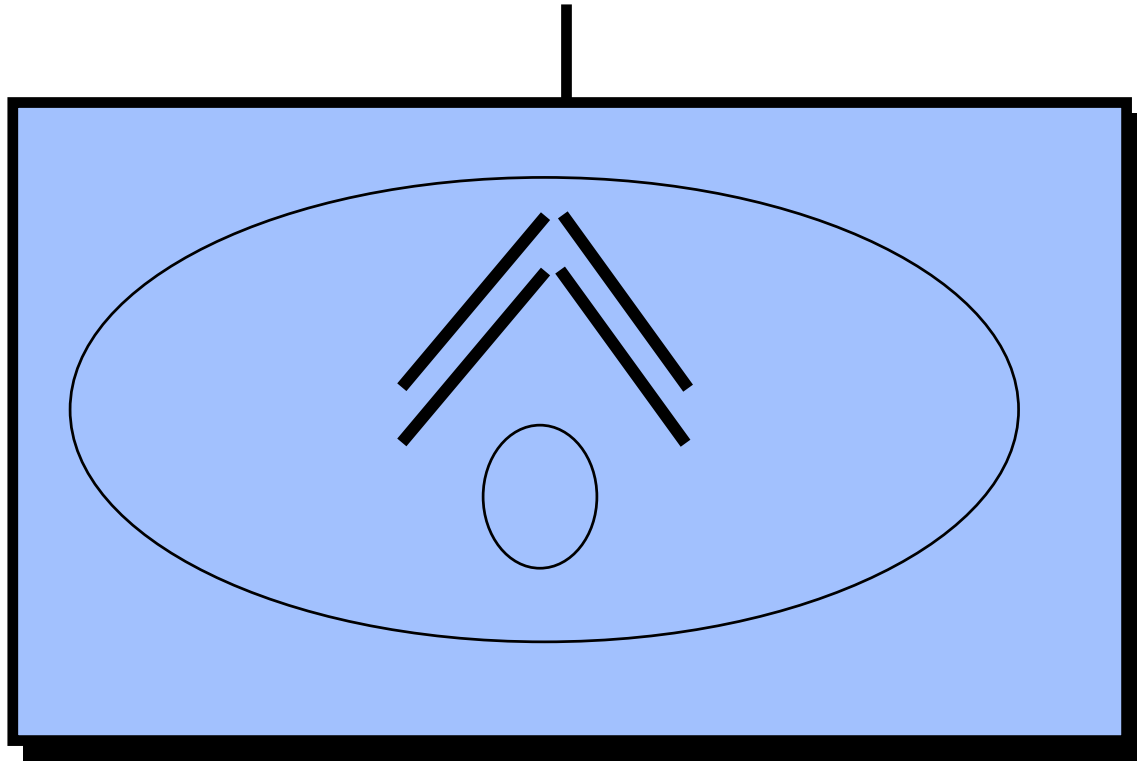
Options:

- Displace by platoon (preferred)
- Displace by battery echelon
- Displace by battery (least preferred)

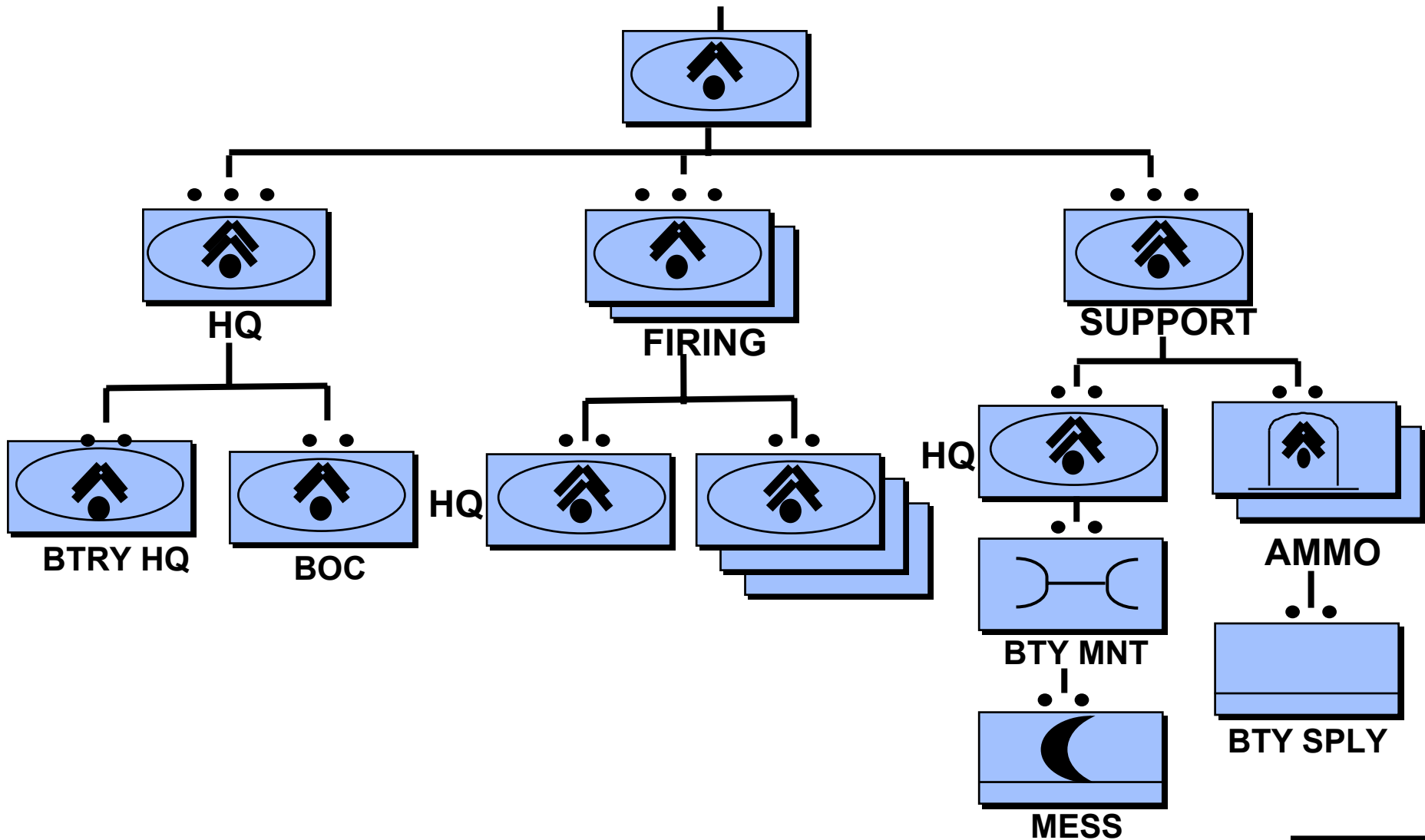
Movement - Tactical Marches

- Open Column: Daylight Operations; Enemy detection not likely
- Close Column: Limited visibility; maximum command and control
- Infiltration: Vehicles move independently; limited command and control
- Terrain March: Off road movement to reduce vulnerability
- Special Formations: Wedge, Multiple wedge

Firing Battery



Firing Battery Organization



Responsibilities

- (CPT) Commander: Directs Battery in execution of tactical mission
- (1SG) First Sergeant: Assists in overall logistical coordination and LOC operations
- (1LT) Operations Officer: Supervises BOC and directs tactical Fire Direction
- (1LT) Support Platoon Leader: Overall logistics coordinator for the battery, specifically in the areas of Class V & IX

Firing Battery Operations

- Battery Operations Center (BOC)
- Jump TOC Operations (JTOC)
- Logistics Operations Center (LOC)

Battery Operations Center

- Plan, Recommend, Control Tactical Employment
- Disseminate Messages and Commands
- Coordinate Survey Operations
- Perform Jump TOC Operations

BOC Functions (Fire Direction)

- Select Number of Rockets
- Down Range Mask Checks
- FSCM Checks
- Select Launcher to Fire
- Transmit Fire Orders

Jump TOC Operations

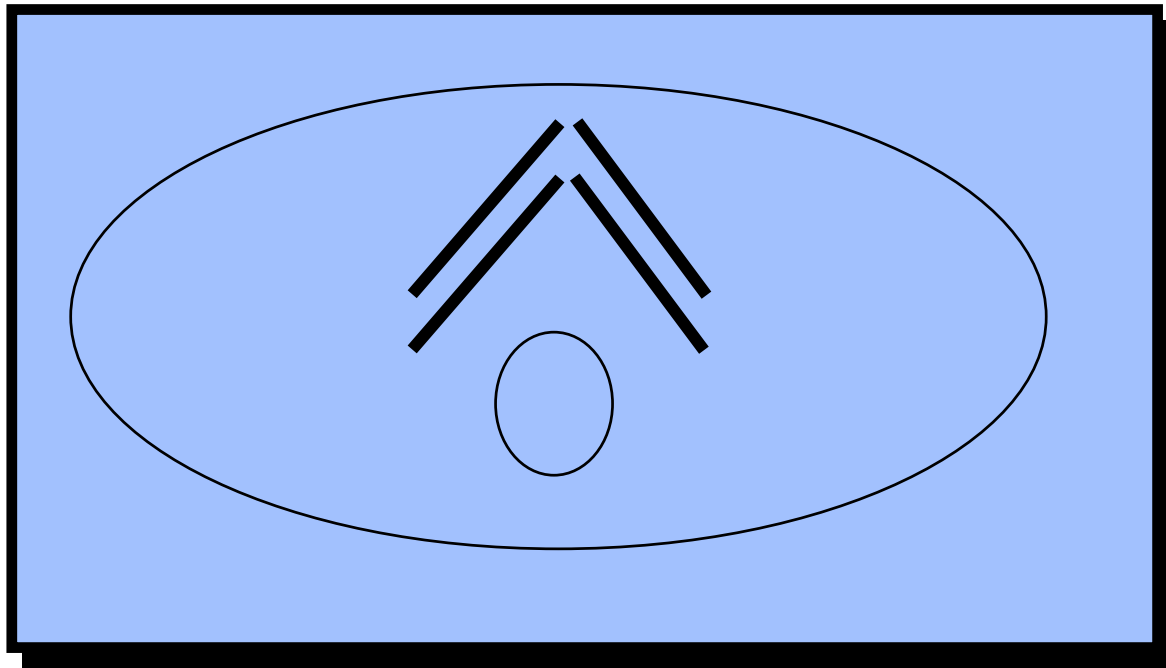
- Established to maintain C³ when TOC is moving, destroyed or FDS is non- mission capable
- Establishes comms with higher HQ TOC, subordinate Batteries and Platoons
- Firing Platoon POC assumes control of battery

Logistics Operations Center

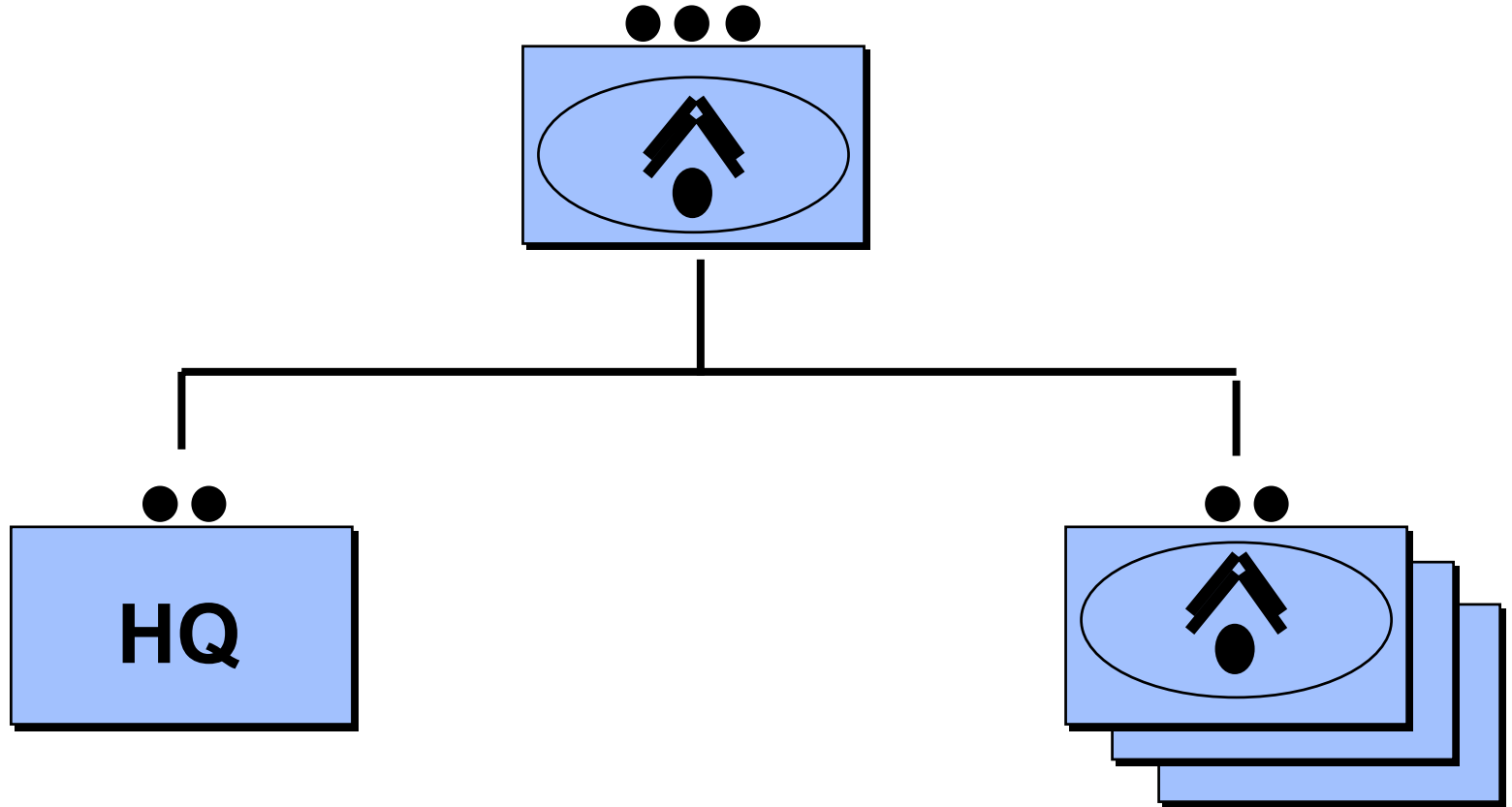
- Primary C² center for all admin log operations and battery defense.
- Coordinates external support.
- Support PLT LDR/1SG directly supervise LOC operations.

Firing Platoon

• • •



Firing Platoon Organization



Firing Platoon Key Personnel

- Platoon Leader (2LT)
- Platoon Sergeant (SFC)
- Firing Section Chief x 3 (SSG)
- Fire Direction Chief (SGT)

Firing Platoon Operations

- Conducts operations under battery control
- Occupies separate OPAREA
- Platoon Leader RSOPs own OPAREA

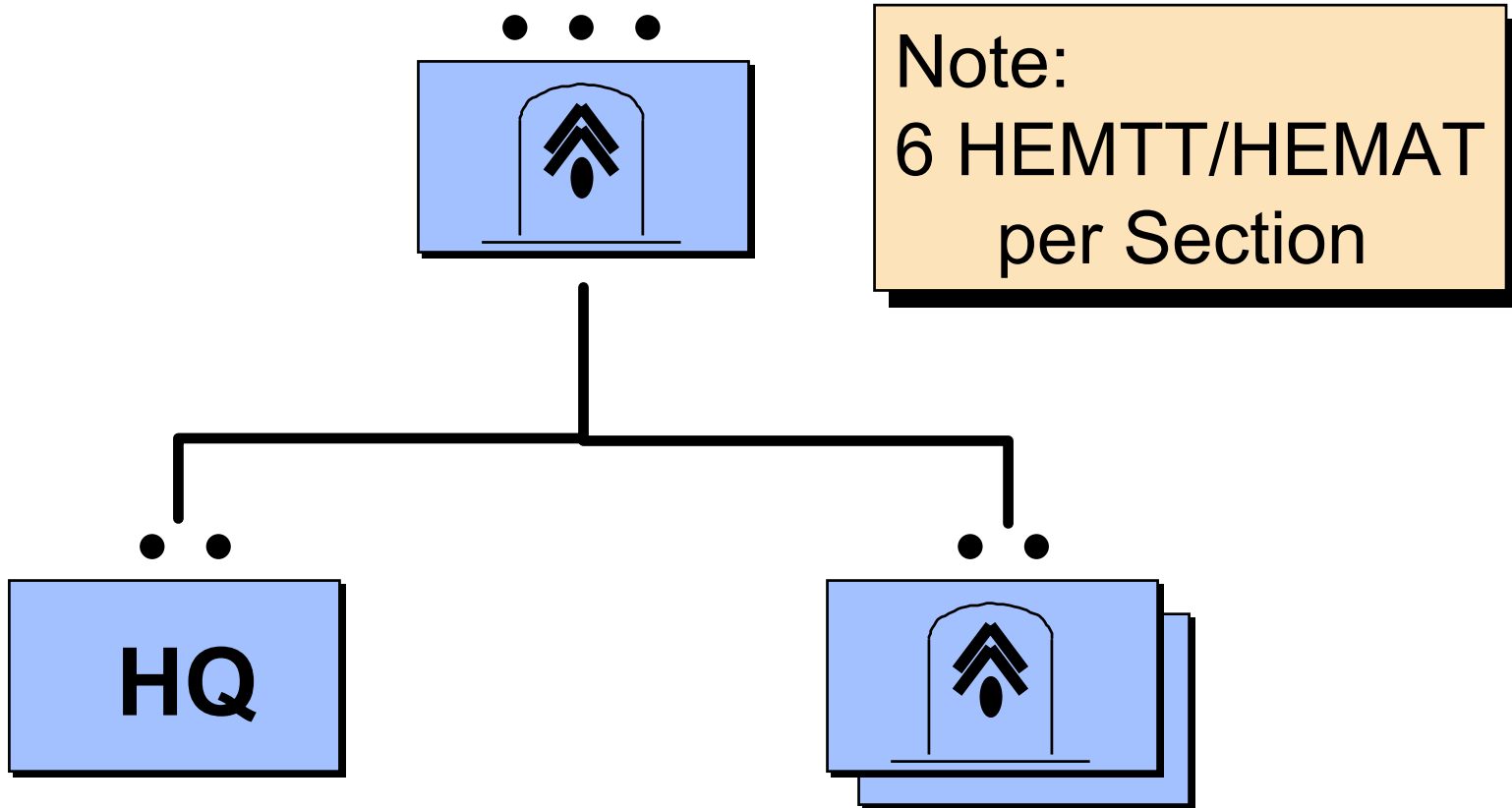
Firing Platoon Responsibilities

- Reconnaissance Selection and Occupation of Position (RSOP)
- Monitor Communications between BOC and Launchers
- Posturing of Launchers and Munitions
- Platoon Defense
- Coordination of Platoon Logistics

Jump BOC Operations

- Established to maintain C³ when BOC is moving, destroyed or FDS is non- mission capable
- Establishes commo with higher HQ TOC, subordinate Batteries and Platoons

Support Platoon Organization



Support Platoon Key Personnel

- Platoon Leader (1LT)
- Platoon Sergeant (SFC)
- Ammunition Section Chief x 2 (SSG)

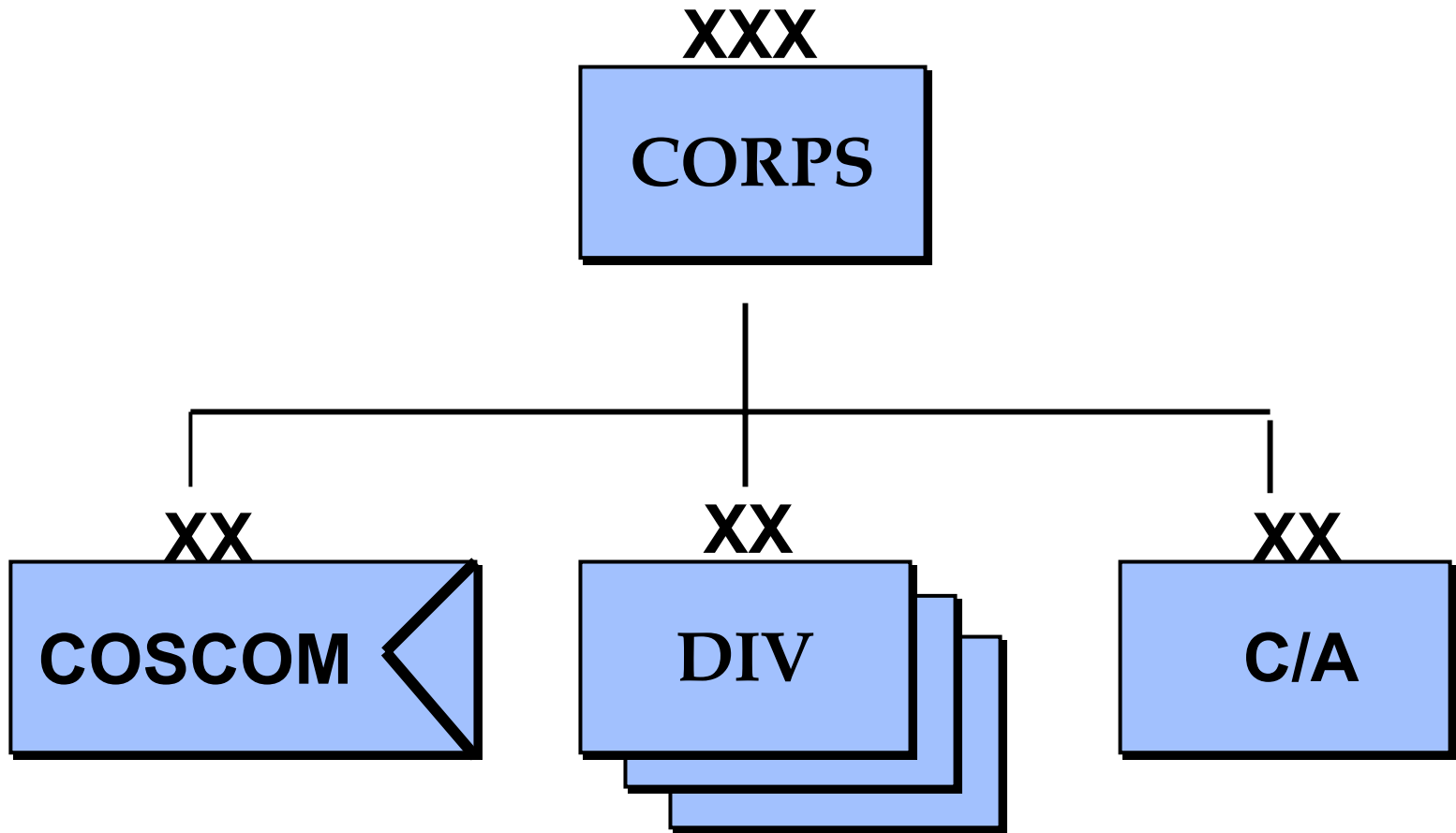
Identify CSS Requirements for MLRS Units

Combat Service Support

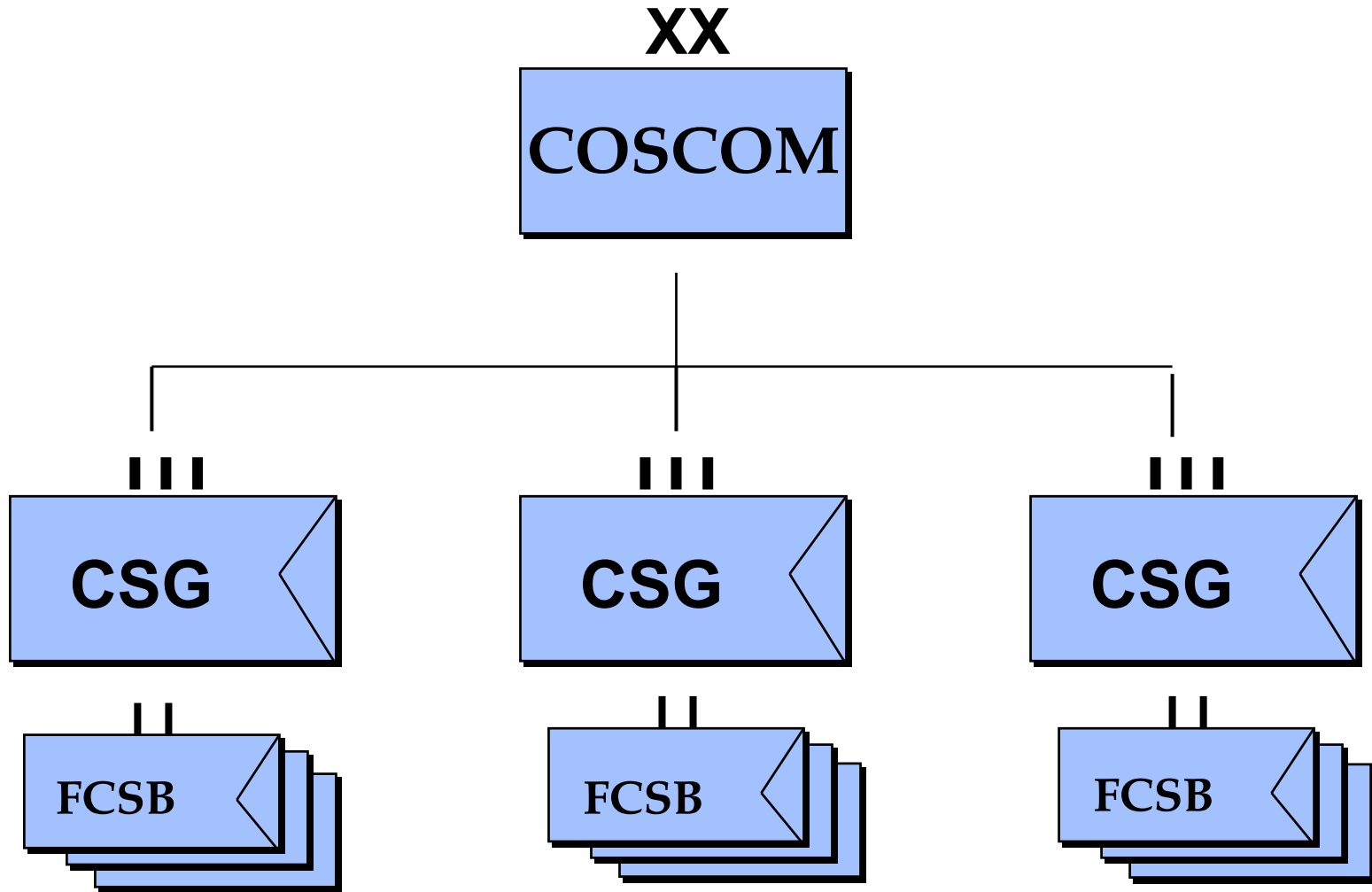
- MAN, ARM, FIX, FUEL, MOVE, and SUSTAIN forces in combat.
 - Corps Support Command (COSCOM)
 - Division Support Command (DISCOM)

Logistics Support Areas

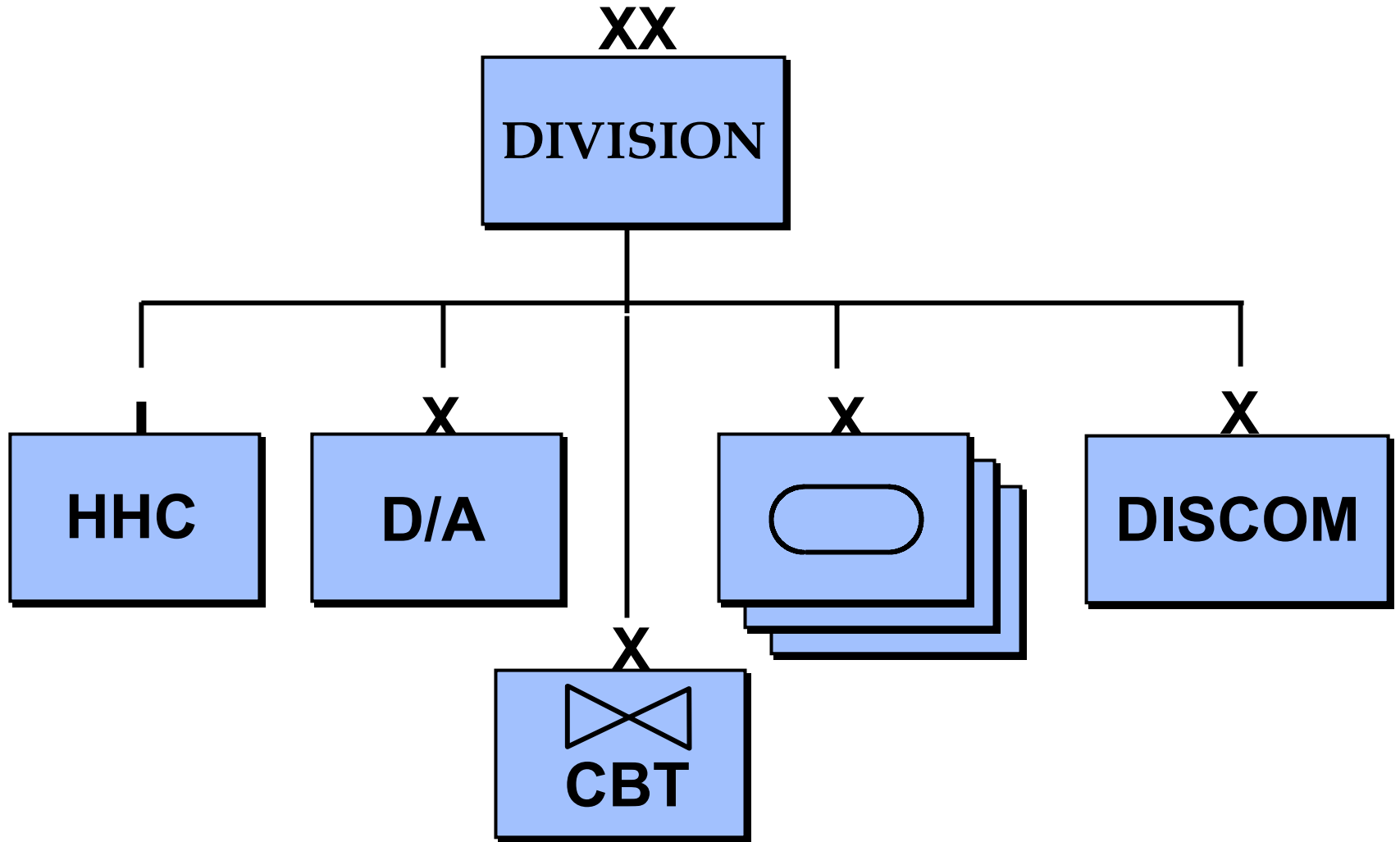
CORPS



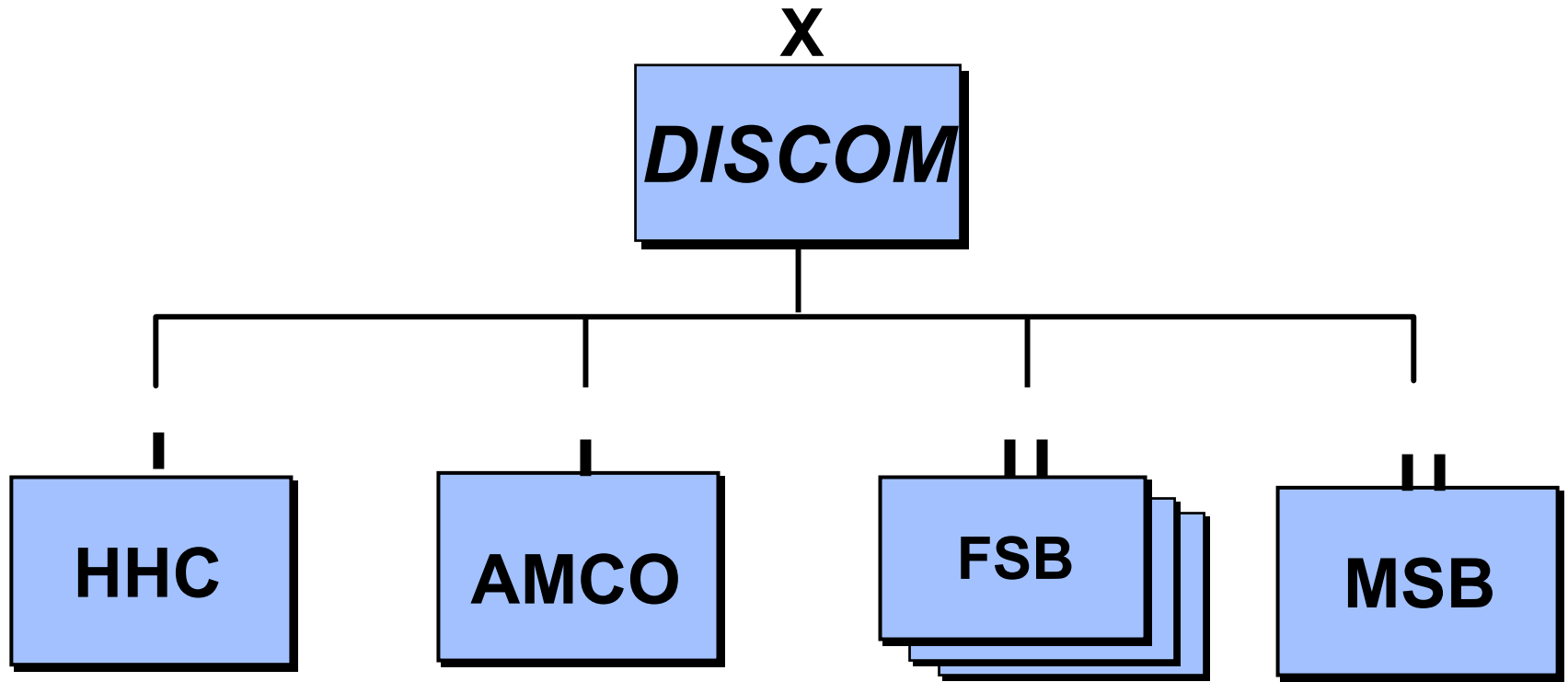
Corps Support Command



DIVISION

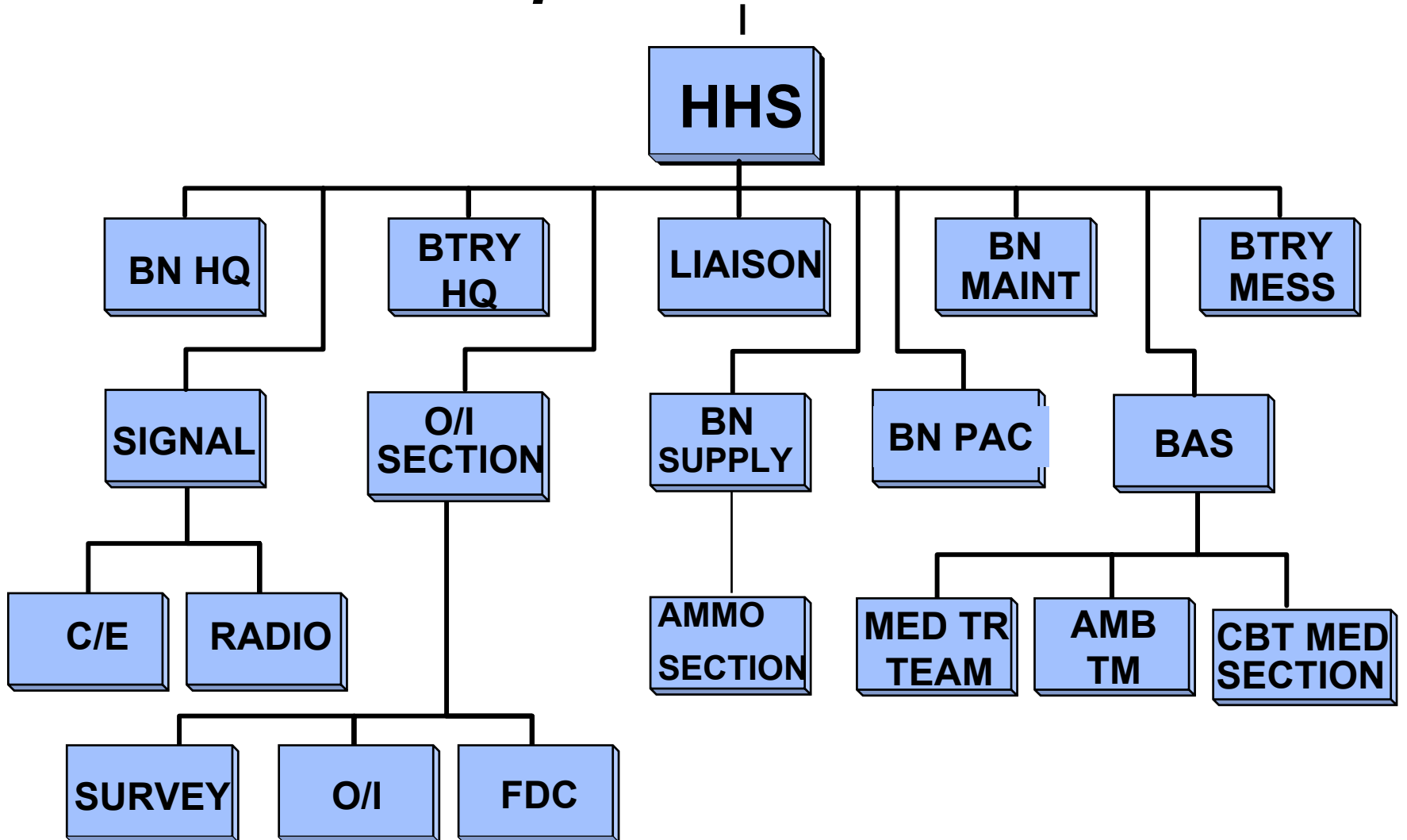


Division Support Command



Battalion Logistics

Admin Logistics Operation Center



Logistical Operational Control

- OPTION 1 - Decentralized, BC ensures that adequate quantity of supplies exist.
- OPTION 2 - Centralized within the battalion. ALOC assumes control of all logistics operations.
- OPTION 3 - Shared control of certain logistics functions.

Decentralized Control

- Advantages
 - Support autonomous operations.
 - Provides the flexibility at battery level.
- Disadvantages
 - Increased vehicular traffic in the battery area.
 - Each firing battery works separately to fulfill the same logistical requirement.

Centralized Control

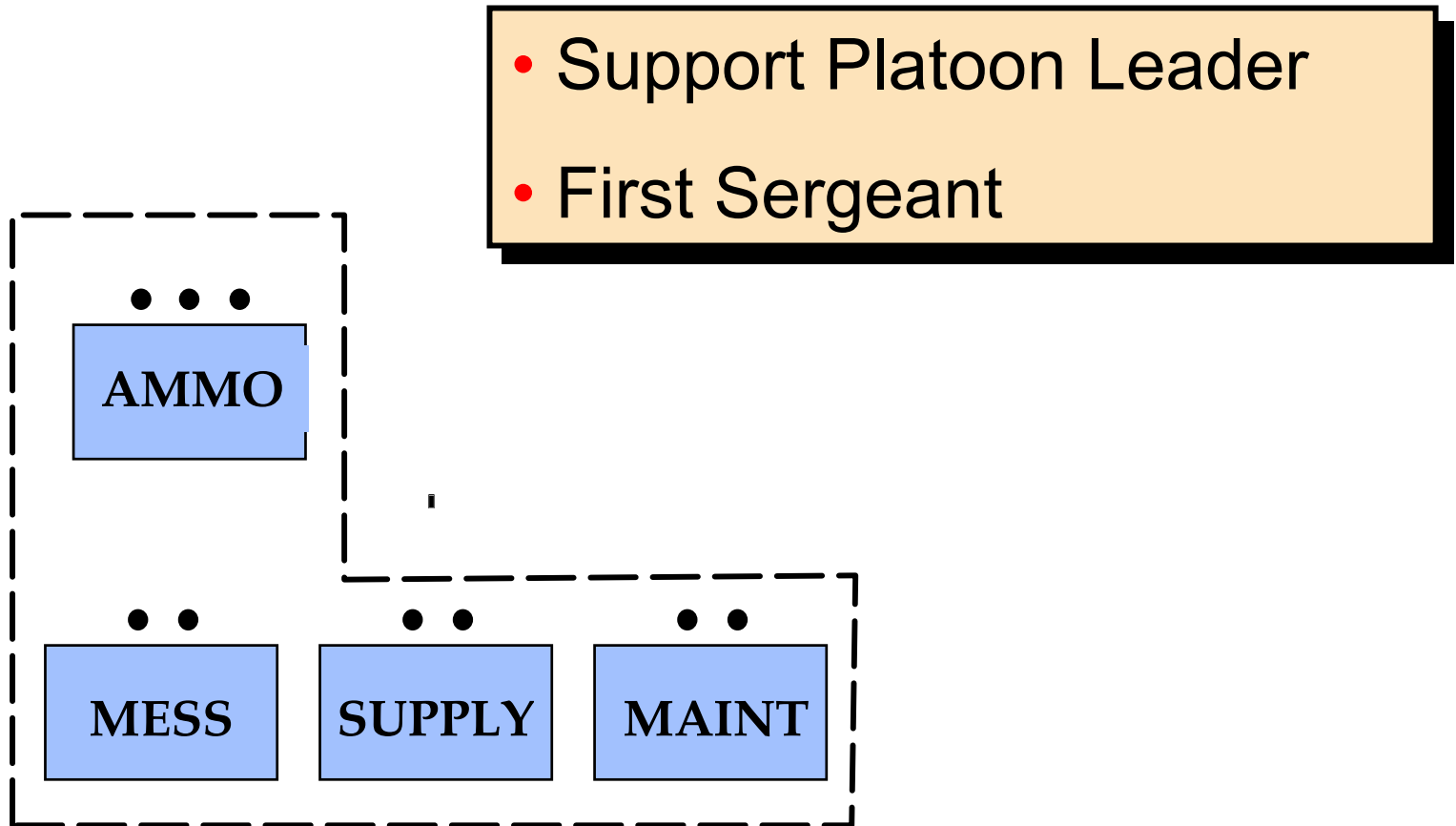
- Advantages
 - Enhances survivability by reducing signature.
 - Reduces logistics support strain from the battery.
- Disadvantages
 - Battery turn around time may increase.
 - Impairs ability to employ firing battery autonomously.

Shared Control

- Advantages
 - Reduces a logistic burden in specific areas.
- Disadvantages
 - Increases logistics C² strain on ALOC because of manpower constraints.

Battery Logistics

LOC Organization



LOC Functions

- Maintenance
- Ammunition Re-supply
- Mess Operations
- Re-supply POL
- Re-supply Expendables
- Personnel & Administration

Arming

Ammunition Planning



Ammunition Operations

- Ammunition Basic Load (ABL)
 - Wartime initial issue
- Required Supply Rate (RSR)
 - Estimated Sustainment
- Controlled Supply Rate (CSR)
 - Actual Availability

Expenditure Rates

- Expenditure Rates:
 - A projection of the anticipated firing rate.
 - Aids all leaders in:
 - Posturing launchers and munitions
 - Planning ammunition resupply
- Types: Sustained, Surge and Peak

Sustained Rate

- Level of effort a committed force can expect for an extended period of time.
- 84 rockets/14 LPCs per launcher per day.
- Requires 2 HEMTTs (w/trailer) to rearm a launcher.

Surge Rate

- Level of effort a committed force can expect when facing a main attack
- 150 rockets/25 LPCs per launcher per day.
- Requires 4 HEMTTs (w/trailer) to rearm a launcher.

Peak Rate

- Level of effort a committed force can expect during an intense period of time.
- Most likely occurs when Reinforcing Arty.
- 264 rockets/44 LPCs per launcher per day.
- Requires 6 HEMTTs (w/trailer) to rearm a launcher.

Ammunition Storage Facilities

- Corps Storage Area (CSA)
- Ammunition Supply Point (ASP)
- Ammunition Transfer Point (ATP)
- Ammunition Holding Area (AHA)
- Reload Point (RL)

Corps Storage Area (CSA)

- 170 - 190KM Behind the FLOT
- One CSA per Division to Support ASP and ATP Operations
- Operated by GS Ammunition CO.
- ATACMS (M39)

Ammunition Supply Point (ASP)

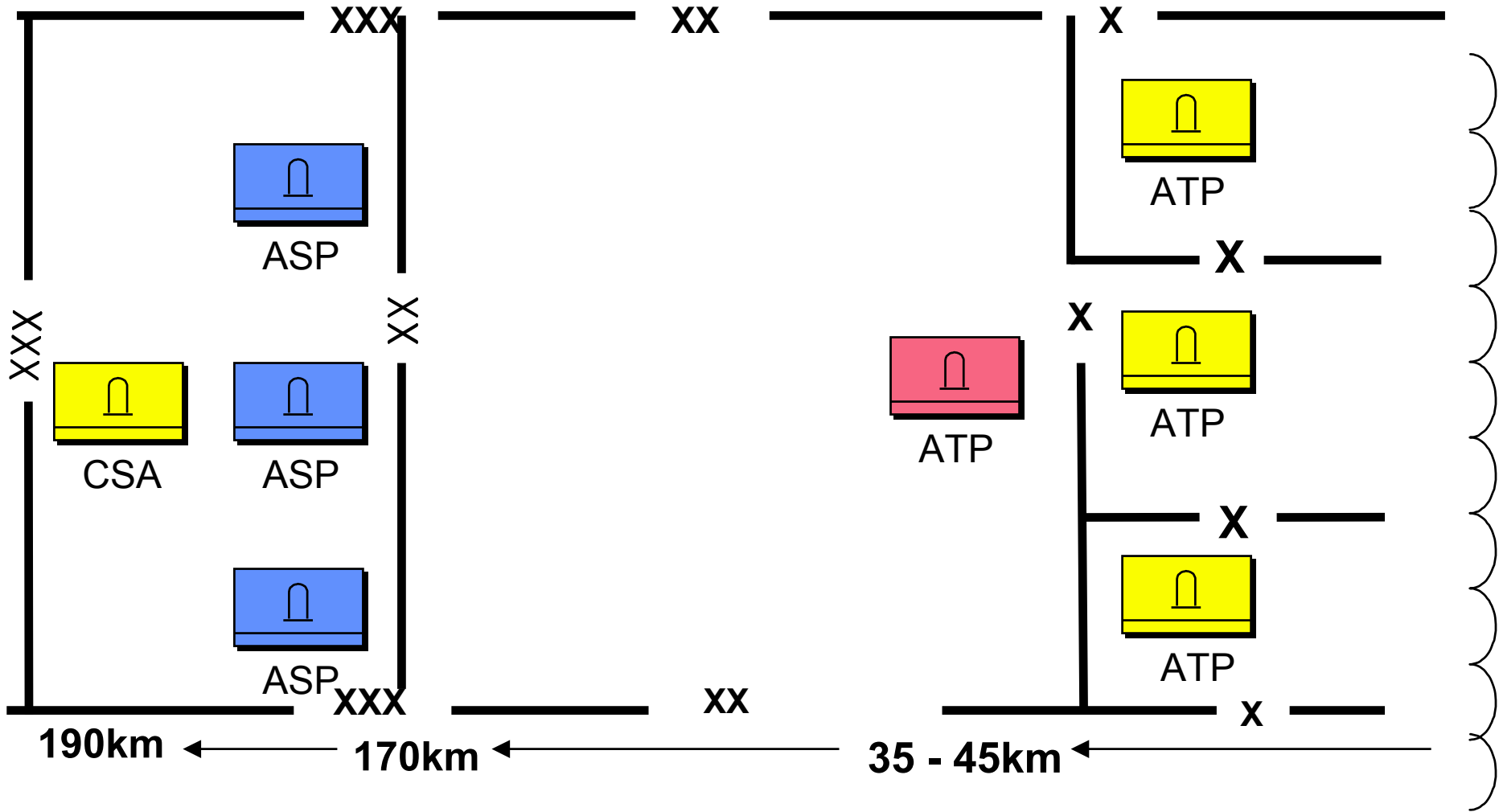
- 170* KM Behind the FLOT
- Alternate sources of ammunition (M 26) for units in the division area.
- Operated by CSG DS Ammunition CO.
- Units draw ATACMS (M 39) from ASP.

*Distance may be less. Dependant upon size of Division area.

Ammunition Transfer Point (ATP)

- 30 - 45 KM behind the FLOT
- Up to four per division
 - One per Maneuver Brigade
 - One per Division support area
- Operated by CSG DS Ammunition CO.
- High volume ammunition (M26)

Doctrinal Distances



Ammunition Holding Area (AHA)

- Battalion/Battery
 - Platoon normally only to cache ammo for initial phase.
- Storage point NOT an issue point.

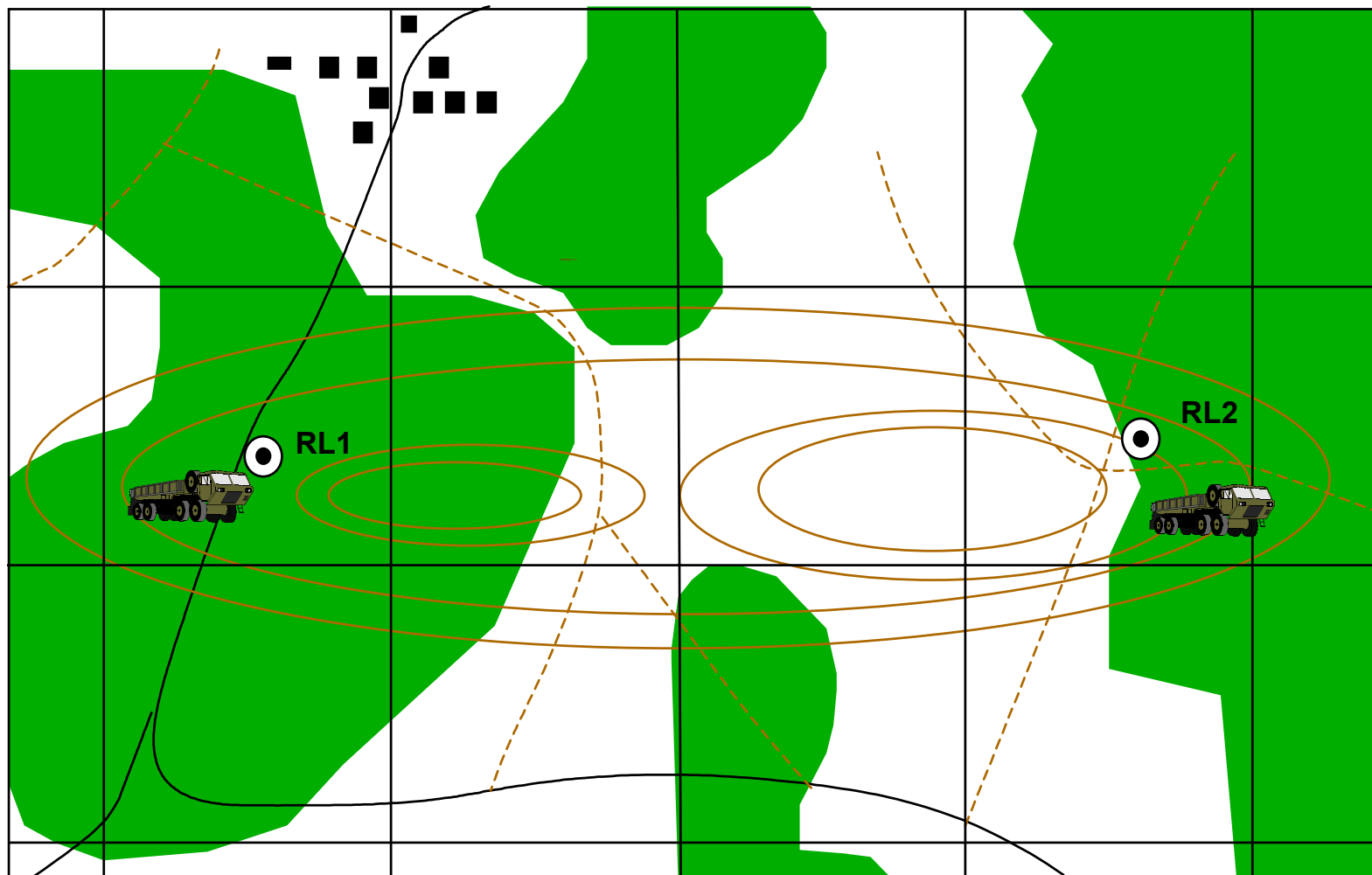
Reload Point (RL)

- Two per platoon OPAREA.
- Issue point for launchers.

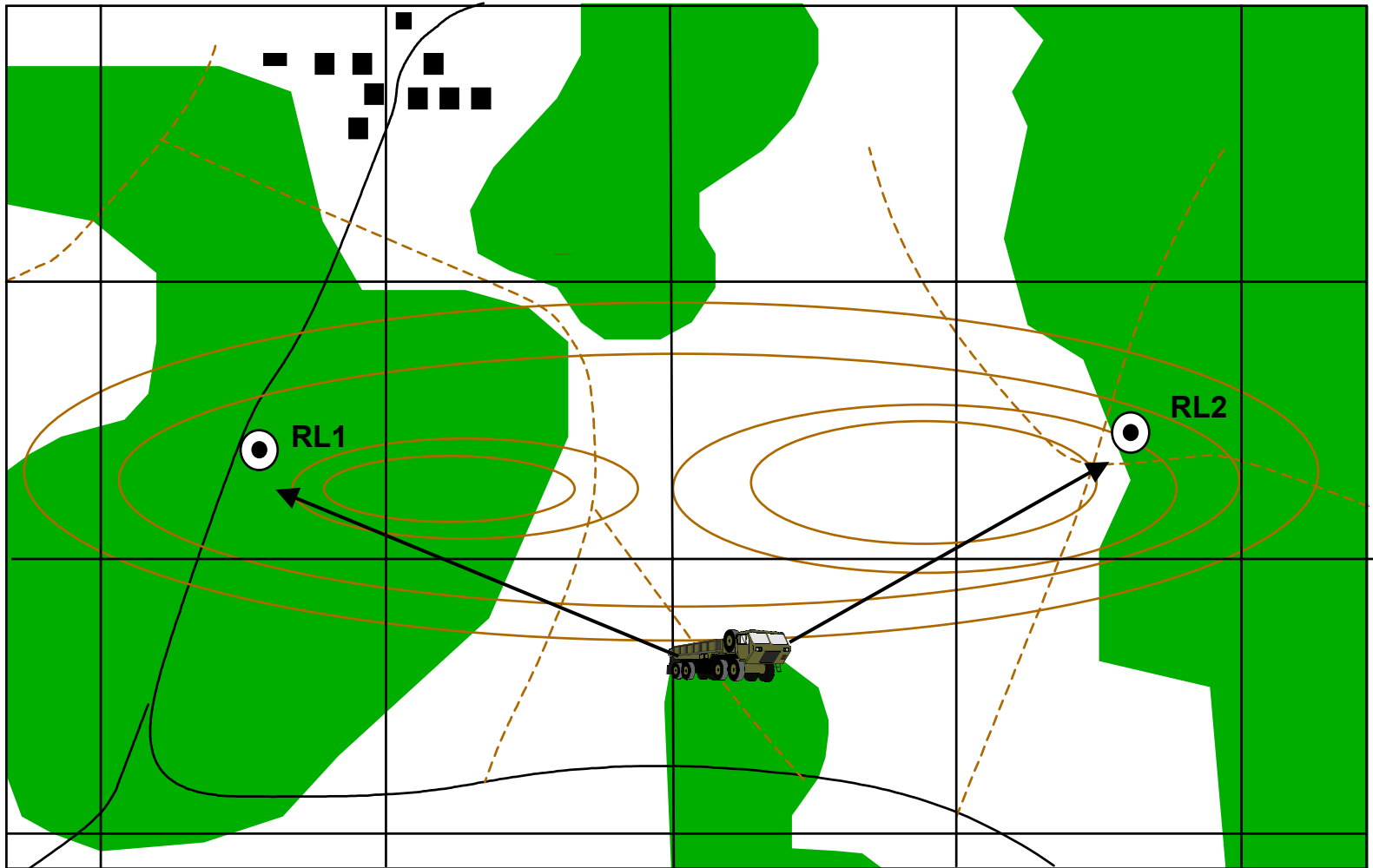
Platoon Ammo Re-supply Techniques

Option 1	(Occupied)
Option 2	(Observed)
Option 3	(Unoccupied)

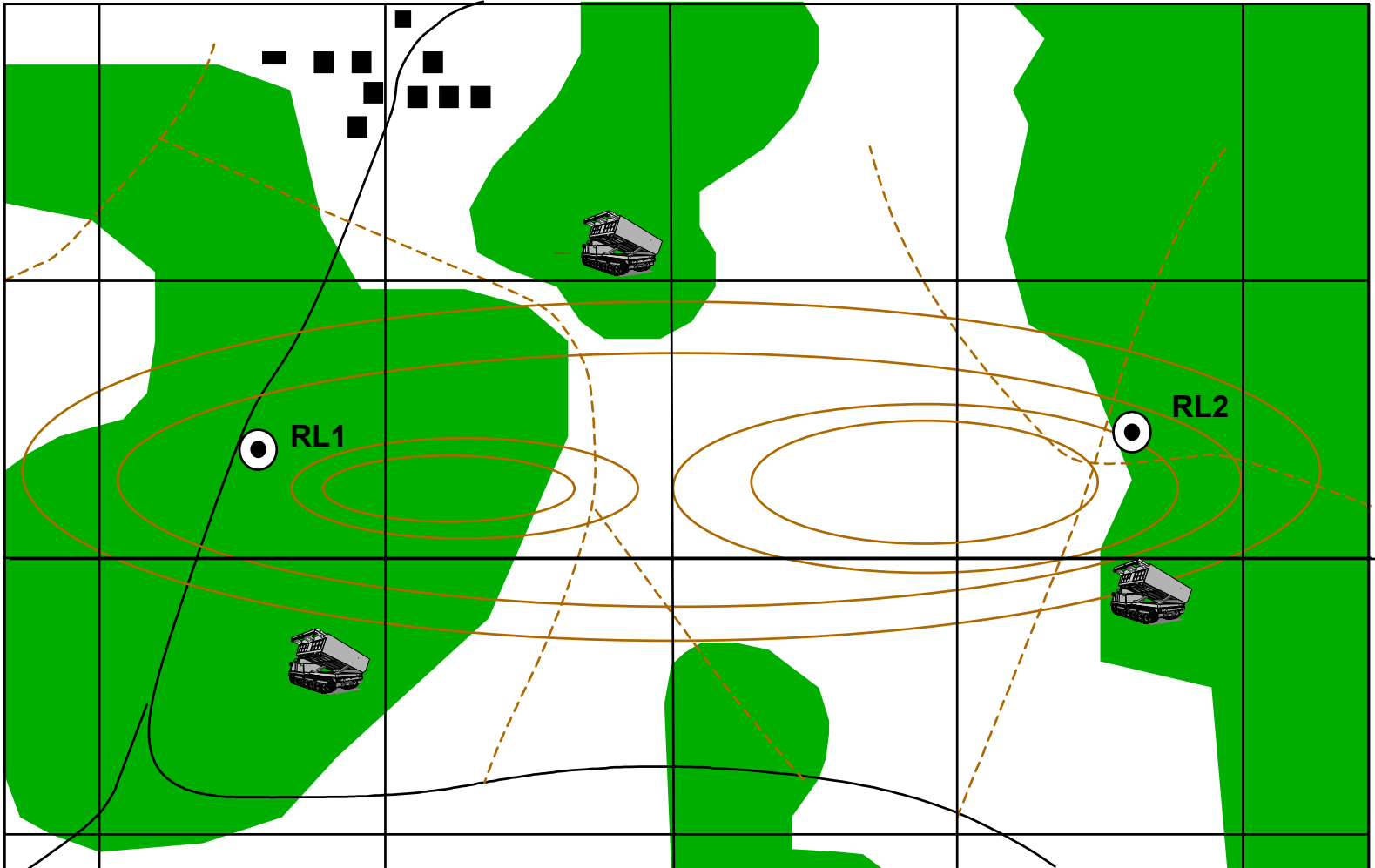
Occupied Reload Point



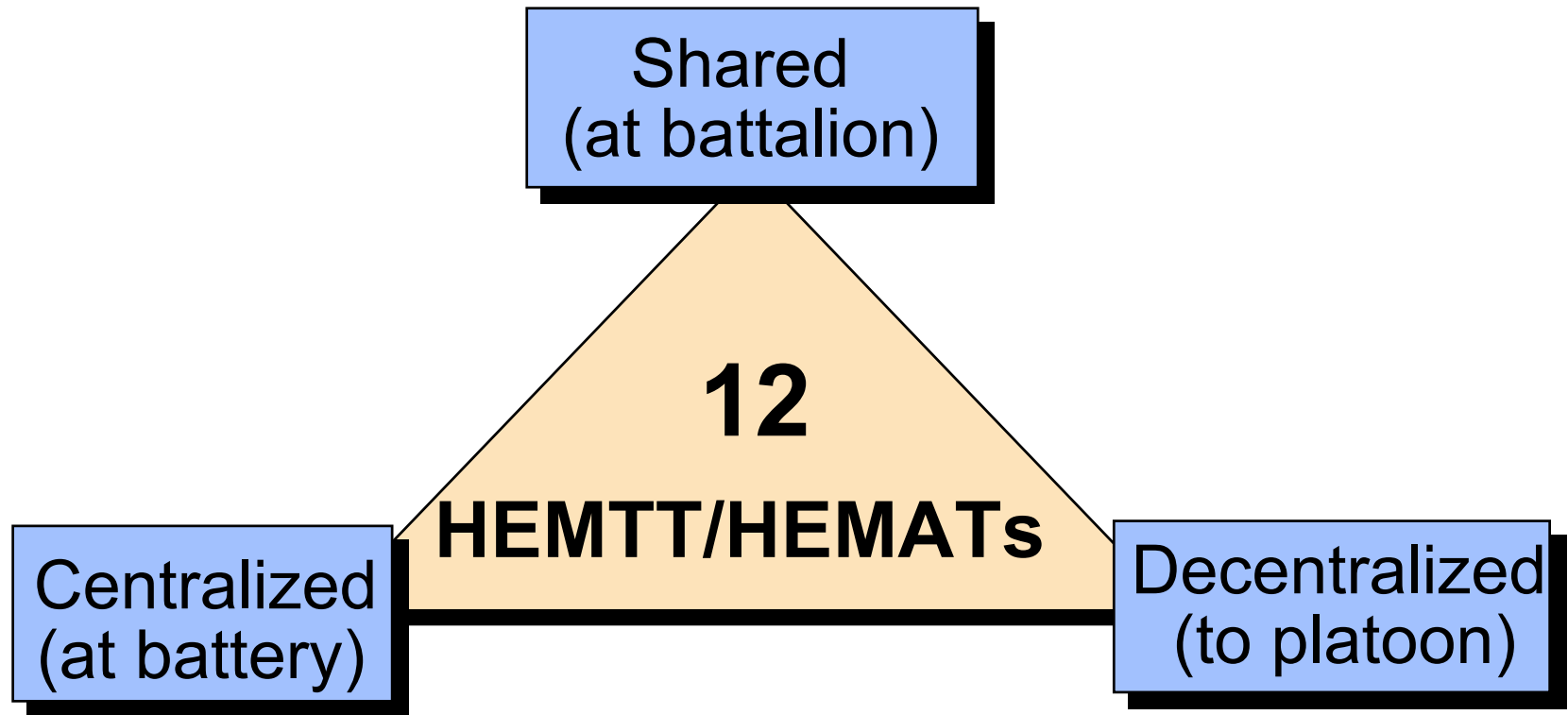
Observed Reload Point



Unoccupied Reload point



Ammo Re-supply Options



Decentralized Control

Places some HEMTTs under the control of the firing platoons

Advantage:

- Quick resupply rate

Disadvantage:

- May lose command and control

Centralized Control

Battery HQ controls HEMTTs and manages ammunition resupply

Advantage:

- Excellent command and control

Disadvantage:

- Slower resupply rate

Shared Control

Battalion consolidates control of some HEMTTs
Creates a battalion ammunition platoon

Advantage:

- Superior command and control

Disadvantage:

- Slowest resupply rate

Considerations for Re-supply Options

- Tactical Fire Direction
- Distances to and from units/ATPs
- Expected Rates of Fire
- Number of trucks & trailers available
- Soldier's land navigation skills
- Type of ammunition
- Maintenance of equipment

Fixing

MLRS Maintenance

- Organization
 - Battalion/Battery
- Maintenance Concept

Battalion Maintenance Support

- Battalion Maintenance
- Headquarters Battery Maintenance

Battalion Maintenance Support

- Maintaining forward
 - UMCP (Unit Maintenance Collection Point)
 - Decision to evacuate based on time required to repair.
 - Maintenance time guidelines (P 6-11).

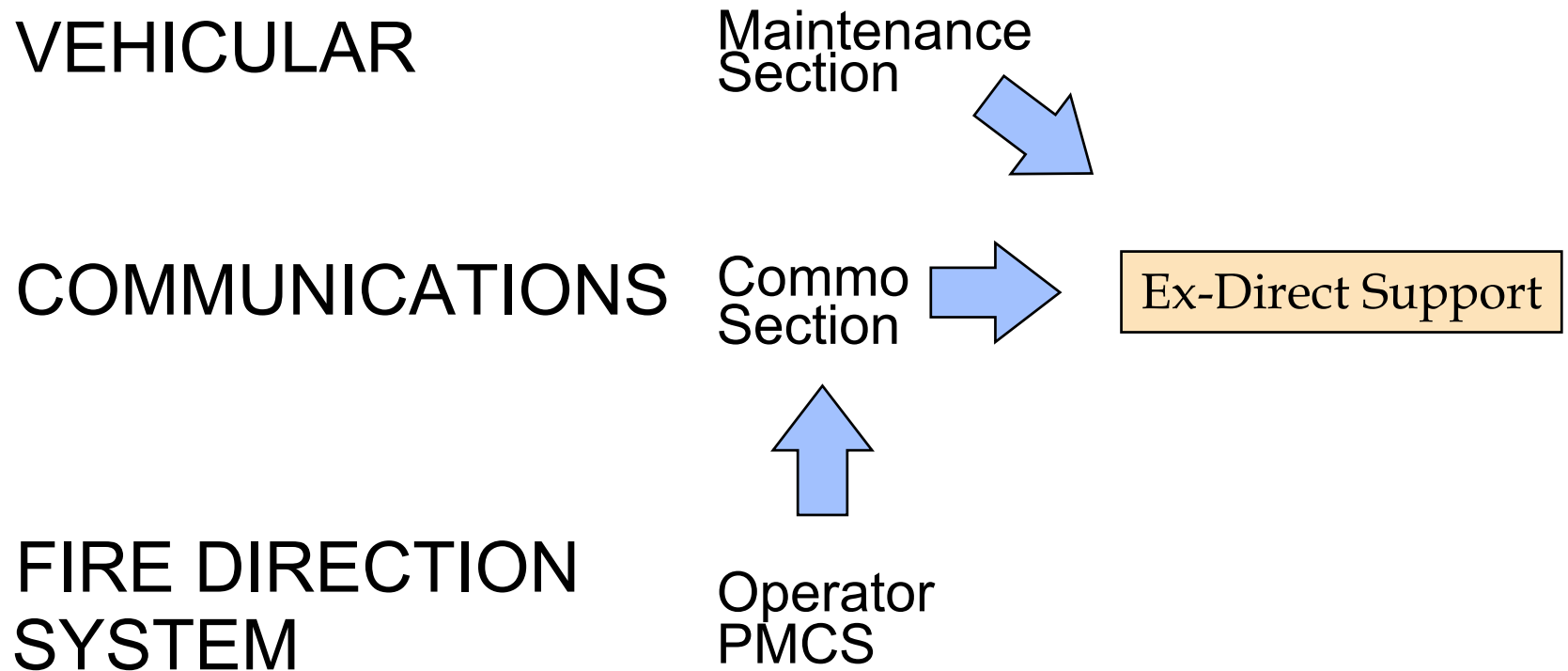
Firing Battery Maintenance Operations

- FCS Crew-level
 - -10 and -20 level
- Battery Maintenance Section
 - Automotive Maintenance
 - Parts

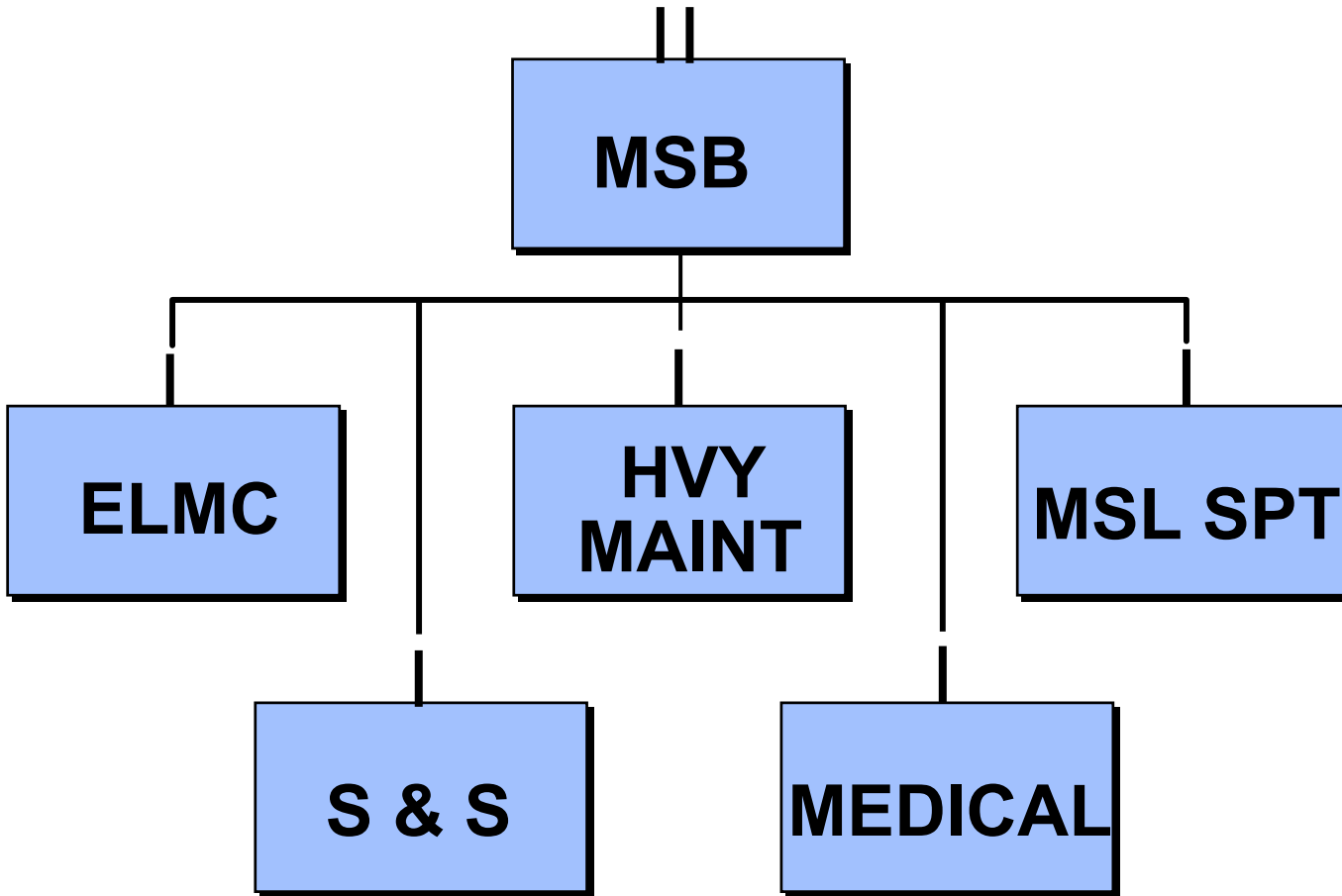
Maintenance Concept

- A Function of:
 - Type of Maintenance
 - (FCS & NON-FCS)
 - Level of Maintenance
 - Organizational
 - Intermediate Direct Support

Non-FCS Maintenance



Main Support BN (MSB)



Electronic Maintenance Company (ELMC)

- COMMO/COMSEC Equipment
- Special Repair (FDS/LCU)

Heavy Maintenance Company

- Automotive Repairs (MST)
- Generator Repairs

Missile Support Teams

- Missile Support Unit (FCS specific)
 - Maintenance Support Teams (27M MST)
 - Battery level
 - Platoon Level

FCS Maintenance

- Organization
- Intermediate
- Direct Support

FCS Maintenance Organizational

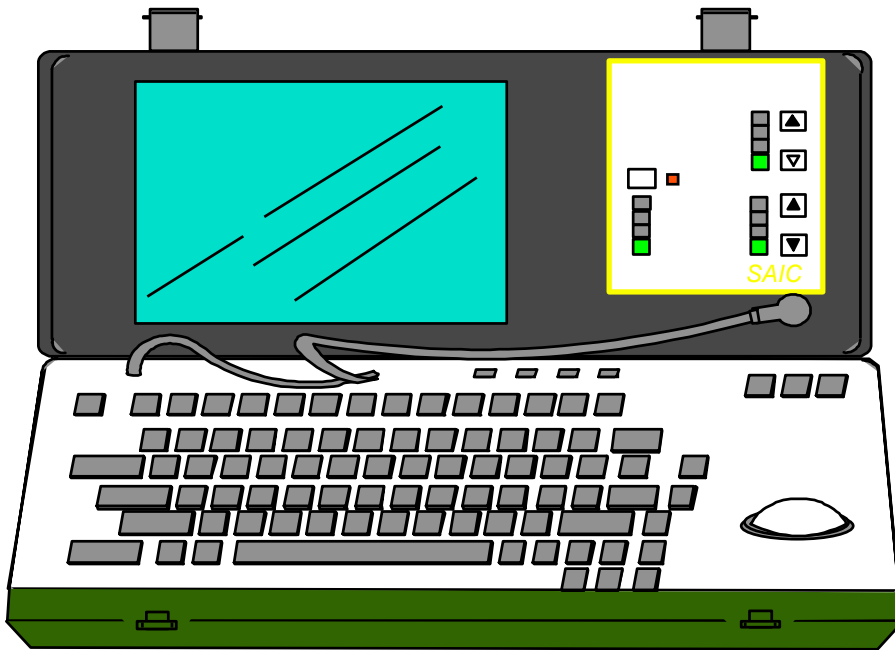
- Performed by Launcher Crew
- Built in Test Equipment (BITE)
- PMCS
- Remove/Replace LRUs
- Services

FCS Maintenance Intermediate DS

- MOS 27M Soldiers attached from the Missile Support Unit of the Division MSB or the FCSB.
 - Detailed Troubleshooting
 - Repair of Cables/Connectors
 - Remove/Replace LRUs

FDS Maintenance

AN/GYK-37



- Organizational
- PMCS only
- Intermediate Direct Support
- ELMC

Fueling

Fueling

Hot refuel:

- All vehicles refuel in route to OPAREA (along route of march).
- Preferred method.

OPAREA refuel:

- Fuel truck tops off vehicles in OPAREA.
 - Fuel truck moves to each individual position.
 - Vehicles move to centrally located truck.

***Sustaining
Soldiers and
Their Systems***

Combat Service Support

- Postal Services
- Personal Demand Items (Class VI)
- Command Information
- Morale, Welfare and Recreation
- Chaplain Activities

Summary

- MLRS Employment Concept
- Tactical Missions
- MLRS Organization and Operations
- CSS Requirements for MLRS Units

Questions??

